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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert Gilmour

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SHEPPARD, MULLIN, RICHTER & HAMPTON LLP
333 SOUTH HOPE STREET
48TH FLOOR
LOS ANGELES, CA 90071-1448

EXAMINER

BROWN, MICHAEL A

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,966	Applicant(s) GILMOUR, ROBERT	
	Examiner MICHAEL BROWN	Art Unit 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-47, 50-54 and 57-69 is/are rejected.
- 7) ☒ Claim(s) 48, 49, 55 and 56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 44-47, 50-54, 57-62, 65-66 and 68-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Cassford '911.

Cassford discloses in figures 1-5 a knee brace comprising a support member 10, having an upper cuff 12, and a lower cuff 14, the upper cuff is adapted to be secured adjacent a thigh of a user, and the lower cuff is adapted to be secured about a tibia of the user, the upper cuff having a back plate 22, a hinge 16, connecting the upper cuff and the lower cuff, the hinge located proximate to the knee joint of the user, a resilient liner 76, having a plurality of discrete liner segments (the two vertical members of 76), at least one of the plurality of discrete liner segments is adapted to conform to the body portion of the user to which the support member is secured, at least one of the plurality of discrete liner segments is attached to the back plate (fig. 1), the back plate comprises a receptacle formed therein (the inside arcuate portion of 22) at least one of the plurality of discrete liner segments has an attachment member (hook and loop material) removably received in the receptacle, at least one of the plurality of discrete liner segments attached to the back plate has an adjustable shape (via inflating and deflating), at least one of the plurality of discrete liner segments further comprises a pair

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of adjustable segment portions (the two vertical portions are inflatable which make them adjustable), the pair of adjustable segment portions is individually adjustable (air can be forced from one side while allowing air in the other side), the pair of adjustable segment portions comprise a pair of pad portions (the two vertical members of 66), spaced apart to define a tibial crest groove (the opening groove formed in the middle of 66) therebetween, the pair of pad portions being individually adjustable on either side of the tibial crest groove to conform to a particular shape of the user's tibia and/or maintain the tibia in a desired position, the pair of pad portions are individually movable in a direction in toward the user's tibia, and out away therefrom, and are rotatable clockwise or counter-clockwise (the pair of pads can be rotated before or after they are attached to the support via the Velcro fasteners), at least one of the pair of pad portions further has an adjustable size (via air being pumped therein), at least one of the pair of pad portions is inflatable and/or deflatable to provide the adjustable size, a spacer (the opening, the groove formed between the two portions), provided intermediate to at least one of the pair of adjustable segment portions and the back plate, the spacer has an adjustable size (via inflating and deflating of 66), the spacer is inflatable and/or deflatable to provide the adjustable size, at least one of the plurality of discrete liner segments has an adjustable shape and/or an adjustable size (via inflating and deflating), plurality of discrete liner segments further comprises a pair of segment portions (the two vertical portions of 66), at least one of the pair of segment portions being movable to provide the adjustable shape (via inflating and deflating), at least one of the plurality of discrete liner segments is inflatable and/or deflatable to provide the adjustable size, one of the

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discrete liner segments is removably attached to the lower cuff by a hook and loop fastener system (col. 5, lines 18-26), the plurality of discrete liner segments comprises a micro-porous waterproof cover material (the inflatable covers have to hold air in and prevent water from enter therein) contacting the body portion of the user, at least one of the plurality of discrete liner segments conforms to the shape of a thigh and a calf of the user as the knee brace is secured to the user (fig. 1), the upper cuff comprises a first strap 52 for securing the upper cuff to a thigh of the user and the lower cuff comprises a second strap 36 for securing the lower cuff adjacent to a calf of the user, at least one of the plurality of discrete liner segments is removable (via hook and loop material), and at least one removable liner segment is adapted to be secured between at least one of the upper cuff and a thigh of the user and the lower cuff and a calf of the user (fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cassford in view of Kenny.

at least one of the discrete liner segments including an electrode portion connected to an electrical power source. Kenny teaches in figures 1-27 an electrode 701 connected to an electrical power. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the electrode and the electrical power as

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taught by Kenny could be incorporated into the liner in order to impact therapeutic stimulation to the leg.

Claims 64 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassford in view of Taylor.

Cassford discloses in figures 1-5 a knee brace, substantially as claimed. However, Cassford doesn't disclose the support being semi-rigid. Taylor teaches in figures 1-4 an orthotic comprising a frame that is made of a semi-rigid material. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the support member disclosed by Cassford could be fabricated of a semi-rigid material as taught by Taylor in to allow the medical attendants to make adjustments to the support member. The thermoplastic material and the deformable metallic material could be polyurethane and aluminum wherein both materials are adjustable.

Allowable Subject Matter

Claims 48-49 and 55-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 43-47, 50-54 and 57-69 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL BROWN whose telephone number is (571)272-4972. The examiner can normally be reached on 5:30 am-4:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Brown/
Primary Examiner, Art Unit 3772